

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1061927

Luminaire Tested: S125RDR-H1270D830-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1061927  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-85)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDR-H1270D830-X4F0-XX-UDD-WVL-S  
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

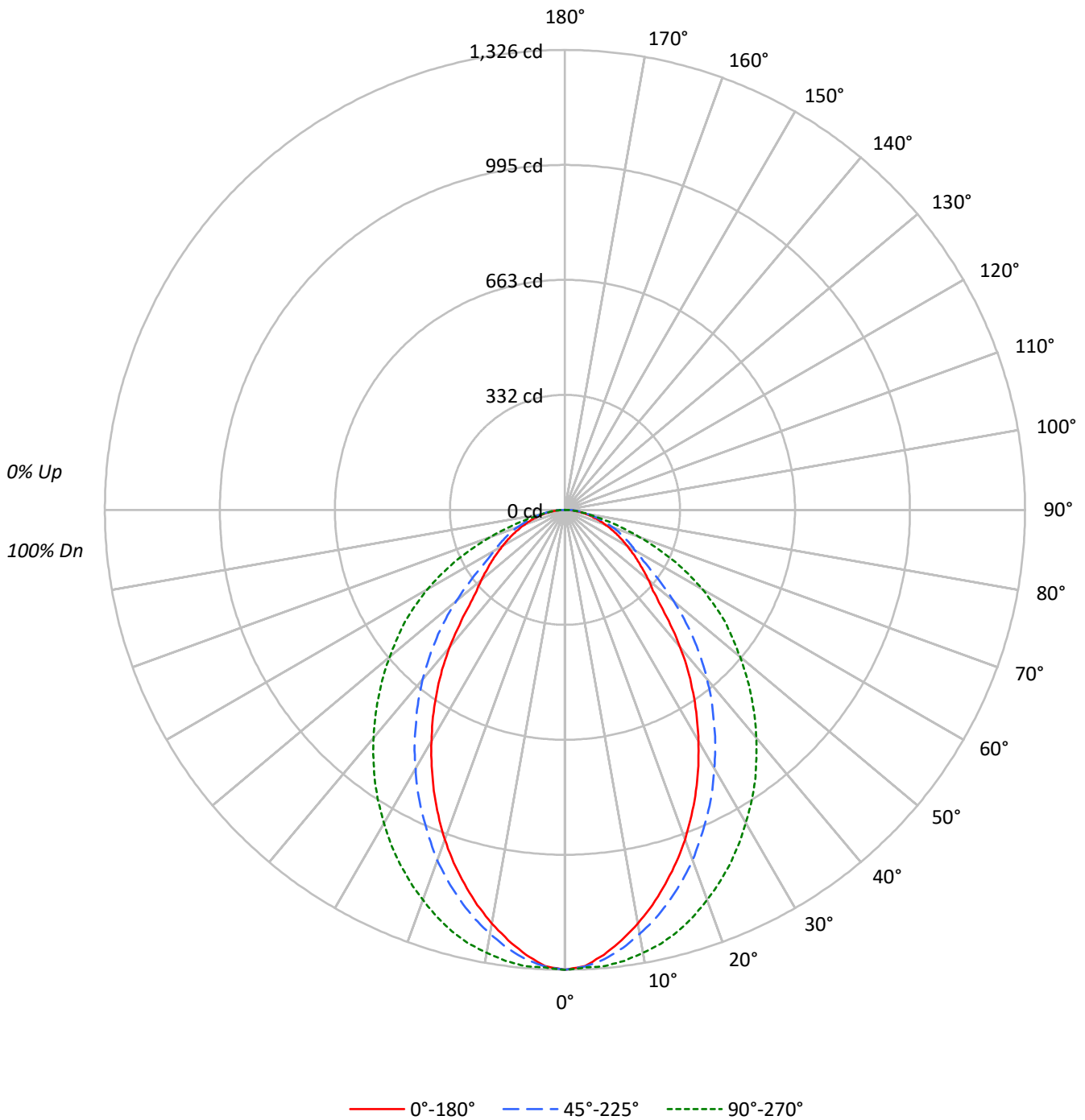
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2485.7 lumens  
Efficiency: N/A  
Efficacy: 68.1 lumens/watt  
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 36.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT

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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20					20					20					20	
RC	80					70					50					30					10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				
1	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86				
2	101	94	88	83	99	92	86	82	89	84	80	85	81	78	82	79	76	74				
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66	64				
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56				
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50				
6	74	62	54	48	72	61	53	48	59	52	47	58	52	47	56	51	46	44				
7	69	57	49	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40				
8	65	52	44	39	63	52	44	39	50	43	38	49	43	38	48	42	38	36				
9	61	48	41	35	59	48	40	35	47	40	35	46	39	35	45	39	35	33				
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	30				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	9130	9130	9130
5°	8899	8991	9128
10°	8465	8678	9067
15°	7960	8309	8970
20°	7415	7881	8774
25°	6792	7377	8553
30°	6119	6845	8288
35°	5411	6291	8028
40°	4643	5727	7715
45°	3792	5095	7391
50°	3362	4370	7051
55°	3085	3625	6758
60°	2845	3210	6293
65°	2654	3086	5611
70°	2480	2933	4586
75°	2290	2748	3384
80°	2153	2573	2470
85°	1991	2512	2093

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 7391 cd/sqm

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CATALOG NUMBER: S125RDR-H1270D830-X4F0-XX-UDD-WVL-S

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	122.7	4.9
10°-20°	330.5	13.3
20°-30°	454.3	18.3
30°-40°	481.4	19.4
40°-50°	420.2	16.9
50°-60°	319.3	12.8
60°-70°	213.9	8.6
70°-80°	110.3	4.4
80°-90°	33.1	1.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	907.5	36.5
0°-40°	1388.9	55.9
0°-60°	2128.4	85.6
0°-90°	2485.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2485.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1326	1326	1326	1326	1326	
5°	1288	1301	1301	1310	1321	120
15°	1117	1138	1166	1217	1258	313
25°	894	922	971	1052	1126	410
35°	644	681	748	854	955	401
45°	389	428	523	648	759	307
55°	257	265	302	444	563	230
65°	163	167	189	253	344	162
75°	86	91	103	110	127	92
85°	25	32	32	29	26	28
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1326.0	1326.0	1326.0	1326.0	1326.0
2.5°	1316.7	1326.0	1318.0	1318.0	1320.7
5°	1287.6	1300.8	1300.8	1310.1	1320.7
7.5°	1251.8	1266.4	1274.3	1295.5	1311.4
10°	1210.7	1226.6	1241.2	1273.0	1296.8
12.5°	1167.0	1184.2	1206.7	1247.8	1280.9
15°	1116.7	1137.9	1165.7	1217.3	1258.4
17.5°	1066.3	1087.5	1122.0	1182.9	1229.3
20°	1012.0	1034.5	1075.6	1141.8	1197.5
22.5°	953.7	978.9	1022.6	1098.1	1163.0
25°	894.1	921.9	971.0	1051.8	1125.9
27.5°	831.9	865.0	918.0	1004.1	1086.2
30°	769.6	802.7	861.0	955.1	1042.5
32.5°	707.4	743.1	806.7	906.1	1000.1
35°	643.8	680.9	748.4	854.4	955.1
37.5°	581.5	618.6	694.1	804.1	906.1
40°	516.6	555.0	637.2	752.4	858.4
42.5°	450.4	491.4	580.2	699.4	809.4
45°	389.4	427.9	523.2	647.7	759.0
47.5°	344.4	369.6	466.3	594.8	710.0
50°	313.9	327.2	408.0	543.1	658.3
52.5°	283.5	294.1	353.7	490.1	609.3
55°	257.0	264.9	302.0	443.8	563.0
57.5°	230.5	238.4	262.3	397.4	508.7
60°	206.6	213.3	233.1	348.4	457.0
62.5°	184.1	189.4	210.6	302.0	401.4
65°	162.9	166.9	189.4	253.0	344.4
67.5°	141.7	145.7	168.2	206.6	283.5
70°	123.2	124.5	145.7	168.2	227.8
72.5°	104.6	106.0	123.2	136.4	174.9
75°	86.1	91.4	103.3	109.9	127.2
77.5°	70.2	76.8	83.5	86.1	86.1
80°	54.3	62.3	64.9	64.9	62.3
82.5°	39.7	46.4	47.7	45.0	42.4
85°	25.2	31.8	31.8	29.1	26.5
87.5°	11.9	17.2	17.2	15.9	11.9
90°	0.0	0.0	0.0	0.0	0.0



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**CIE UGR TABLE:**

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	14.29	15.79	14.65	16.10	16.41	18.22	19.72	18.58	20.03	20.34
	3H	15.86	17.20	16.24	17.53	17.89	19.64	20.98	20.02	21.31	21.67
	4H	16.47	17.73	16.87	18.08	18.46	20.05	21.31	20.45	21.66	22.04
	6H	16.97	18.13	17.38	18.50	18.89	20.27	21.43	20.68	21.80	22.19
	8H	17.14	18.25	17.57	18.64	19.04	20.33	21.44	20.76	21.83	22.23
	12H	17.27	18.33	17.70	18.71	19.14	20.36	21.42	20.80	21.81	22.24
4H	2H	15.03	16.29	15.43	16.63	17.01	18.34	19.60	18.74	19.95	20.33
	3H	16.81	17.85	17.22	18.25	18.65	19.95	21.00	20.36	21.40	21.80
	4H	17.54	18.48	17.97	18.90	19.34	20.48	21.42	20.91	21.84	22.28
	6H	18.18	19.00	18.64	19.44	19.90	20.82	21.64	21.28	22.08	22.54
	8H	18.41	19.17	18.87	19.61	20.08	20.92	21.69	21.39	22.13	22.60
	12H	18.58	19.26	19.06	19.74	20.21	21.00	21.68	21.48	22.16	22.63
8H	4H	17.94	18.71	18.41	19.15	19.62	20.59	21.35	21.05	21.80	22.26
	6H	18.73	19.36	19.23	19.85	20.33	21.03	21.66	21.52	22.15	22.63
	8H	19.05	19.62	19.57	20.13	20.62	21.18	21.75	21.70	22.26	22.75
	12H	19.33	19.83	19.84	20.32	20.89	21.32	21.82	21.83	22.31	22.88
12H	4H	17.99	18.67	18.47	19.15	19.62	20.59	21.27	21.07	21.75	22.22
	6H	18.81	19.38	19.33	19.89	20.38	21.04	21.61	21.56	22.12	22.61
	8H	19.21	19.71	19.72	20.20	20.77	21.25	21.75	21.76	22.24	22.81